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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Roger Lahille

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EXAMINER

PALABRICA, RICARDO J

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/539,282	Applicant(s) LAHILLE ET AL.	
	Examiner Rick Palabrica	Art Unit 3663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 August 2008 and 17 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-34 and 41-44 is/are pending in the application.
- 4a) Of the above claim(s) 29-32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-28, 33, 34 and 41-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>9/8/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's 8/13/08 election with traverse the apparatus claims and species C, canceled the process claims 35-40, and added new claims 41-44.

The species C identified by the examiner in the 3/13/08 Office action corresponds to the embodiment as shown in Figs. 12-14. Species C is identical with the third embodiment of the invention, as applicant himself admits in the specification (e.g., see pages 8 and 9, and pages 28-34 of the specification).

Applicant's traverse of the restriction requirement is essentially on the grounds that the species are not restrictable. The examiner disagrees.

First, applicant himself has admitted in the specification that there are three embodiments of the claimed invention. Each of these embodiments is a species because each is an alternative for exercising the claimed invention.

Second, the application is a 371 of a PCT application and therefore subject to PCT Rules, including unity of invention. The examiner has shown on page 3 of the 3/13/08 Office action that the three species are distinct (and restrictable) from each other because they lack unity of invention, in view of the lack of the same or corresponding special technical feature among the three species.

The restriction requirement is still deemed proper and is therefore made **FINAL**.

2. Based on applicant's election, claims 31 and 32 are not directed to the elected species C and therefore withdrawn from consideration. The claims recite the first clamping means and second clamping means being activated by a single control device. Species C does not have the first clamping means (i.e., claws 128) and second

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clamping means (i.e., screws 119) both activated by control device 120 (e.g., see page 29 of the Specification). Claims 29 and 30 are also withdrawn from consideration being directed to a non-elected invention.

Accordingly, claims 21-28, 33, 34, and 41-44 are examined in this Office action.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 21-26 and 41-44 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 21 recites a single means, i.e., for making a rigid connection. MPEP

2164.08(a) - Single Means Claim, states:

"A single means claim, i.e., where a means recitation does not appear in combination with another recited element of means, is subject to an undue breadth rejection under 35 U.S.C. 112, first paragraph. In re Hyatt, 708 F.2d 712, 714-715, 218 USPQ 195, 197 (Fed. Cir. 1983)."

In claim 41, the element, "body", has no support in the specification. In fact, the term is not even used or referred to when describing species C, the third embodiment.

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4. Claims 21-28 33, 34, and 41-44 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 21 recites the limitation "at least one face of the housing" in line 6. There is insufficient antecedent basis for this limitation in the claim. This limitation means that there is a plurality of faces of the housing. Not all housings inherently have such plural faces.

The term "close" in claim 24 is a relative term which renders the claim indefinite. The term is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claim 41 recites in the preamble the subcombination of a "connecting device" that is inconsistent with the body of the claim that recites limitations directed to the combination of the "connecting device and the transport housing". This inconsistency presents the question as to whether the claim recites a combination or subcombination. There is insufficient antecedent basis for the limitation that is directed to the combination rather than to the subcombination because the transport housing is not an inherent component of the connecting device. (Note: The examiner interprets the claim to be intended as directed to the subcombination and NOT to the combination. Accordingly, the limitation on the claw mechanism is interpreted as follows: "wherein claw mechanism is engageable to [not engages] an upper end piece of the transport housing in response to the control device being rotated in a first direction.")

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 21-27 are rejected under 35 U.S.C. 102(b) as being anticipated by either one of Yoshizawa et al. (U.S. 6,169,777) or Gilmore et al. (U.S. 5,490,186).

The claim limitations invoke 35 U.S.C. 112, 6th paragraph.

Either one Yoshizawa et al. or Gilmore et al. disclose an apparatus for transporting nuclear fuel assemblies, including a device for blocking a fuel assembly in a housing of a transport basket.

As to claim 21, applicant's "means for making a rigid connection" reads on supporting devices 14A in Yoshizawa et al. (e.g., see Figs. 6 and 7, and paragraph bridging cols. 2 and 3), or clamping frame assembly 52 in Gilmore et al. (e.g., Fig. 2A and col. 7, lines 24+).

Note that either one of the above two elements: a) performs the function specified in the claim; b) is not excluded by any explicit definition provided in the specification for an equivalent; and c) is an equivalent of the means- plus-function limitation. Either one of the prior art element performs the function specified in the claim in substantially the same way, and produces substantially the same results as the corresponding element disclosed in the specification, i.e., either one provides a rigid connection between the upper end piece of the fuel assembly and the open end of the

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housing. In Yoshizawa et al., “upper end piece” reads on upper tie-plate 38 and “housing” reads on basket element 12. In Gilmore et al., “upper end piece” reads on upper nozzle 4 and “housing” reads on outer housing 30.

Claims 22-25 recite limitations are either essentially method limitations or statements of intended or desired use. However, these claims are directed to an apparatus and not to a process. The fuel assembly and its upper end piece, and the transport basket and its housing are part of the intended use clause in the preamble, i.e., “for blocking ...” They do not serve to patently distinguish the claimed structure over that of the reference, as long as the structure of the cited references is capable of performing the intended use. See MPEP 2111-2115.

See also MPEP 2114 that states:

A claim containing a “recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus” if the prior art apparatus teaches all the structural limitations of the claim. Ex parte Masham, 2 USPQ2d 1647.

Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function. In re Danly, 263 F.2d 844, 847, 120 USPQ 528, 531.

[A]pparatus claims cover what a device is, not what a device does.” Hewlett-Packard Co. v. Bausch & Lomb Inc., 15 USPQ2d 1525,1528.

As set forth in MPEP 2115, a recitation in a claim to the material or article worked upon does not serve to limit an apparatus claim.

Any one of the systems in the cited references is capable of being used in the same manner and for the intended or desired use as the claimed invention. Note that it is sufficient to show that said capability exists, which is the case for the cited references.

As to claim 26, the recitation that an element is “configured to” perform a function is not a positive limitation but only requires the ability to perform, i.e., it does not

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constitute a limitation in any patentable sense (e.g., see *In re Hutchison*, 69 USPQ 138, *National Presto Indus. V. West Bend Co.*, 76 F.3d 1185 (Fed. Cir. 1996) or U.S. PTO, Board of Patent Appeals and Interferences No. 87-0642). The apparatus in either one of the cited references is capable of performing the function recited in the claims, and therefore meets the claim limitation.

As to claim 27, applicant's "means for transverse displacement" reads on drive mechanism 17 in Yoshizawa et al. (e.g., see col. 10, lines 58+) or swing bolt 196 in Gilmore et al. (see col. 10, lines 61+).

6. Claims 41-44 are rejected under 35 U.S.C. 102(b) as being anticipated by Gilmore et al.

Applicant's claim language reads on Gilmore et al. as follows (e.g., see Figs. 8 and 9): a) "connecting device" reads on base 244; b) "body" reads on the bottom part of the base; c) "clamping member" reads on bolt 230; d) "control device" reads on operating mechanism 252; e) "claw mechanism" reads on grippers 238; "pin guide" reads on hole 74 (see also col. 12, lines 4+); f) "nut" reads on plate 250.

Again the recitation that an element is "configured to" perform a function is not a positive limitation but only requires the ability to perform, i.e., it does not constitute a limitation in any patentable sense. Note that the configuration of the lower nozzle in Gilmore et al. is essentially similar to the upper end piece of a fuel assembly of a light-water cooled reactor (e.g., a PWR).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 21, 22, 24-28, 33, 34 and 41-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gilmore et al.

As to claims 21, 22, 24-28, 33, 34, applicant's claim language reads on Gilmore et al. as follows: a) "means for making a rigid connection" reads on nozzle holder 66; b) "connecting device" reads on base 244; c) "first clamping means" reads grippers 238; d) "second clamping means reads on bolt 230; d) "means for traverse displacement" and means for axial displacement reads on operating mechanism 252. (Note: In the elected invention (species C), the transverse displacement means and the axial displacement means are activated by a single control device (see page 6, lines 24+ of the Specification); e) "screw" reads on screw 266.

The Gilmore elements, when applied to an upper piece fuel assembly of a water-cooled reactor (e.g., a PWR): a) perform the function specified in the claim; b) are not excluded by any explicit definition provided in the specification for an equivalent; and c) are equivalent of the means-plus-function limitations.

As to claims 41-44, the examiner indicated that these claims are anticipated by Gilmore et al., based on the interpretation of the claw mechanism being "engageable" NOT "engages" an upper end piece. If applicant is of a different opinion, the claims are

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still unpatentable over Gilmore et al. because their apparatus can be applied or adapted to have the means for making a rigid connection (i.e., nozzle holder 66) provide said connection between an upper end piece of a fuel assembly and an open housing of a transport container.

Claim Objection

8. Claim 25 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

Claim 25 fails the infringement test, i.e., it fails to include every limitation of the claim from which it depends (35 U.S.C. 112, fourth paragraph). MPEP 608.01(n), Part III, states:

"[F]or example, if claim 1 recites the combination of elements A, B, C, and D, a claim reciting the structure of claim 1 in which D was omitted or replaced by E would not be a proper dependent claim, even though it placed further limitations on the remaining elements or added still other elements."

Dependent claim 25 replaces the limitation on the "predetermined relative position" of independent claim 21.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. References C-E further illustrate prior art.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rick Palabrica whose telephone number is 571-272-6880. The examiner can normally be reached on 6:00-4:30, Mon-Thurs.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on 571-272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

October 27, 2008

/Rick Palabrica/
Primary Examiner, Art Unit 3663